Amendments To The Claims

Claims 1-11 are pending in the present application. Claims 4-10 are amended as set forth below. New Claims 12-17 are added. This listing and version of the claims replaces all prior listings and versions of the claims.

1. (original) A bone mineral density evaluation system for evaluating a bone mineral density from an X-ray picture of a mandible, said X-ray picture containing a picture of a specimen disposed beside a picture of said mandible, said system comprising:

detecting means for detecting a gradation of said picture of said specimen;

correcting means for correcting the gradation of said X-ray picture so as to make the result of detection by said detecting means comply with a standard value; and

evaluating means for evaluating the bone mineral density on the basis of the corrected gradation as corrected by said correcting means.

- 2. (original) The bone mineral density evaluation system according to Claim 1 wherein said evaluating means makes evaluation on the basis of the corrected gradation of a particular region of said X-ray picture.
- 3. (original) The bone mineral density evaluation system according to Claim 2 wherein said particular region includes a region corresponding to an alveolar bone portion around a first premolar.

- 4. (currently amended) The bone mineral density evaluation system according to Claim 1 any one of Claims 1 through 3 wherein said detecting means detects a gradation of a particular portion of said picture of said specimen.
- 5. (currently amended) The bone mineral density evaluation system according to <u>Claim 1</u> any one of <u>Claims 1 through 3</u> wherein:

the gradation of said picture of said specimen differs from portion to portion thereof; and

said detecting means detects one or both of average and deviation of the gradation of said picture of said specimen.

- 6. (currently amended) The bone mineral density evaluation system according to <u>Claim 1</u> any one of <u>Claims 1</u> through 5, further comprising setting means for setting said standard value.
- 7. (currently amended) The bone mineral density evaluation system according to Claim 6 any one of Claims 1 through 5 wherein said standard value is set based on a result of detection by said detecting means of a particular X-ray picture.
- 8. (currently amended) The bone mineral density evaluation system according to Claim 1 any one of Claims 1 through 7 wherein said evaluating means includes display means for displaying said corrected gradation in the form of histogram.

- 9. (currently amended) The bone mineral density evaluation system according to Claim 1 any one of Claims 1 through 8 wherein said evaluating means includes judging means for judging said bone mineral density on the basis of said corrected gradation.
- 10. (currently amended) The bone mineral density evaluation system according to Claim 1 any one of Claims 1 through 9, further comprising output means for providing together a plurality of evaluation results provided by said evaluation means for respective ones of a plurality of X-ray pictures.
- 11. (original) A bone mineral density evaluation method for evaluating a bone mineral density from an X-ray picture of a mandible, said X-ray picture containing a picture of a specimen disposed beside a picture of said mandible, said method comprising the steps of:

detecting a gradation of said picture of said specimen;

correcting the gradation of said X-ray picture so as to make the result of detection by said detecting means comply with a standard value; and

evaluating the bone mineral density on the basis of the corrected gradation as corrected in said correcting step.

12. (new)A bone mineral density evaluation system for evaluating a bone mineral density from an X-ray picture of a mandible, said X-ray picture containing a picture of a specimen disposed beside a picture of said mandible, said system comprising:

detecting means for detecting a gradation of said picture of said specimen;

correcting means for correcting the gradation of said X-ray picture so as to make the result of detection by said detecting means comply with a standard value; and

evaluating means for evaluating the bone mineral density on the basis of the corrected gradation as corrected by said correcting means,

wherein said evaluating means makes evaluation on the basis of the corrected gradation of a particular region of said X-ray picture,

wherein said particular region includes a region corresponding to an alveolar bone portion around a first premolar, and

wherein:

the gradation of said picture of said specimen differs from portion to portion thereof; and

said detecting means detects one or both of average and deviation of the gradation of said picture of said specimen.

- 13. (new) The bone mineral density evaluation system according to Claim 12, further comprising setting means for setting said standard value.
- 14. (new) The bone mineral density evaluation system according to Claim 13 wherein said standard value is set based on a result of detection by said detecting means of a particular X-ray picture.

- 15. (new) The bone mineral density evaluation system according to Claim 13 wherein said evaluating means includes display means for displaying said corrected gradation in the form of histogram.
- 16. (new) The bone mineral density evaluation system according to Claim 13 wherein said evaluating means includes judging means for judging said bone mineral density on the basis of said corrected gradation.
- 17. (new) The bone mineral density evaluation system according to Claim 13, further comprising output means for providing together a plurality of evaluation results provided by said evaluation means for respective ones of a plurality of X-ray pictures.